

Environmental Data Cube Support System

EDCSS Tutorial Jan 2014



Storefront



Environmental Data Cube Support System

Username:
Password:

log in

Forgot <u>username</u> / password

Register for an account.

About EDCSS

Papers and Presentations

Our Customers

Customer Support

Product Gallery

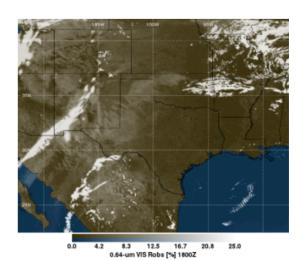
User Documentation

Tutorial

The Environmental Data Cube Support System (EDCSS) is a DoD sponsored program to provide a consistent suite of environmental products for the modeling and simulation (M&S) community. EDCSS Products -- including data, imagery, effects, and text messages -- are developed for ingest by the simulation systems as well as the applications and staff supporting the simulations. View the EDCSS Brochure.

Contact Us

Suggestions



EDCSS 5-km Synthetic Satellite Image Sample

The EDCSS centralizes the definition, production, and distribution of all products to ensure all participants in M&S events have a correlated view of environmental conditions and their impact. All EDCSS products are generated from an underlying consistent environmental scenario that is developed by searching historical archives for relevant conditions and leveraging DoD operational models and authoritative data sources to produce an integrated environment representation.

Front page to end-user:

- Login/Request account
- Product Gallery
- Sample Sites
- Papers & Briefs
- Documentation



Welcome Page

Select **Projects** tab to get started

Projects Product Groups Products Resources

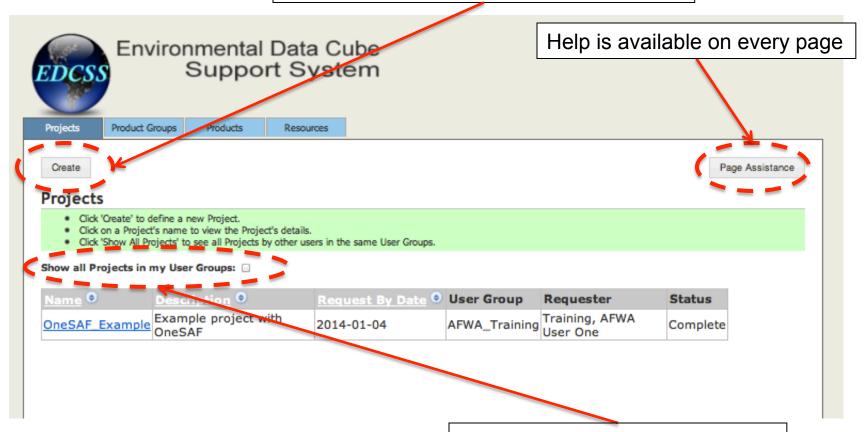
Welcome to EDCSS!

- The process to define a project will take approximately 15-20 minutes.
- If you encounter any problems, click the Page Assistance button in the top-right corner on any tab to view more information or request support.
- To get started, go to the Projects tab.



Project Page

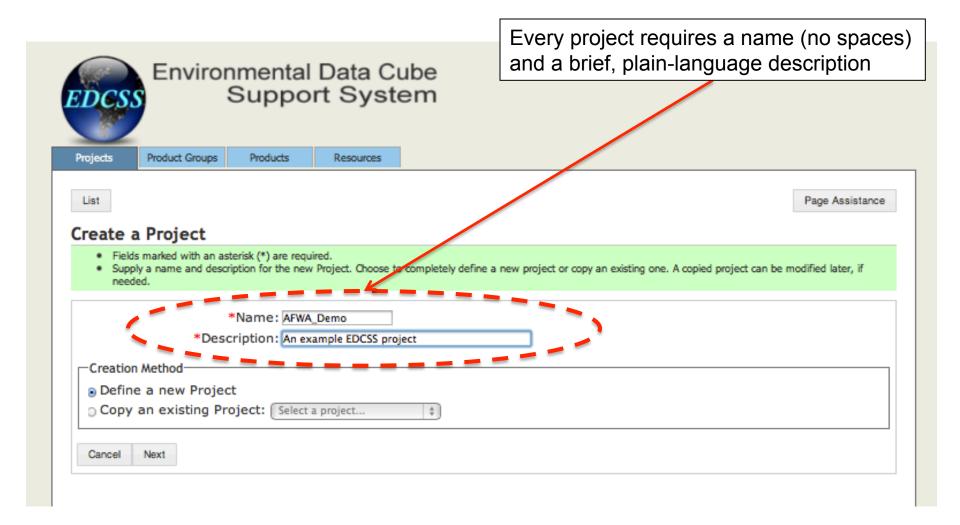
Select **Create** button to start a new project



Users can see only their projects or all projects in their User Group

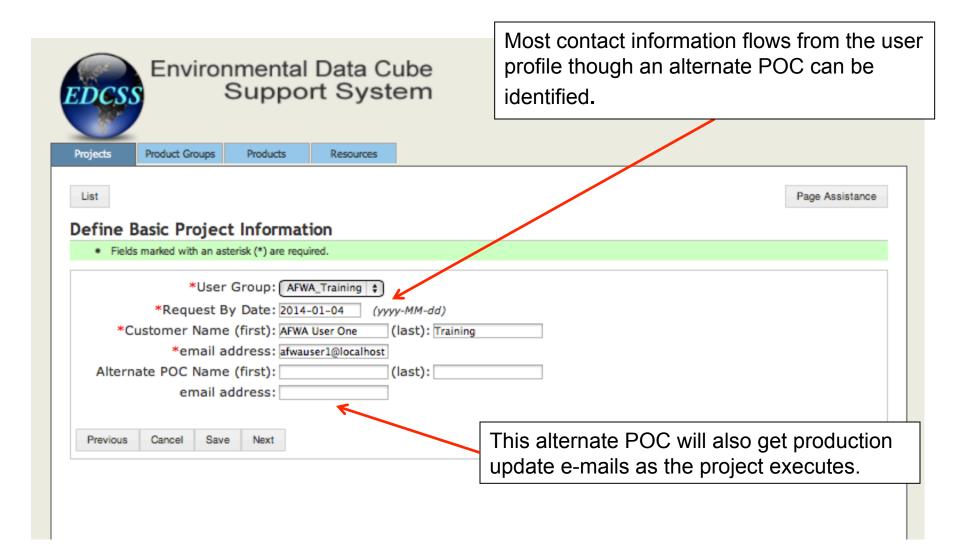


Creating a Project



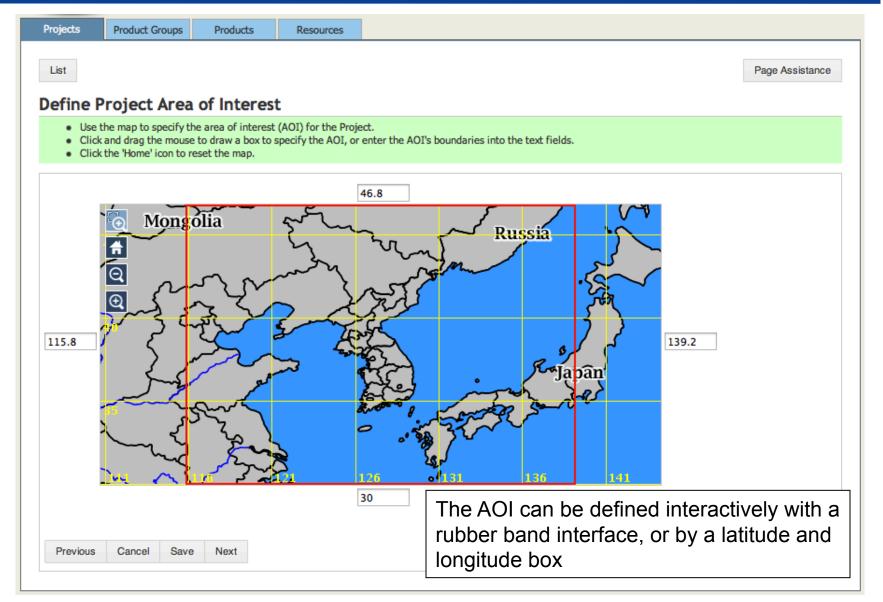


Basic project information



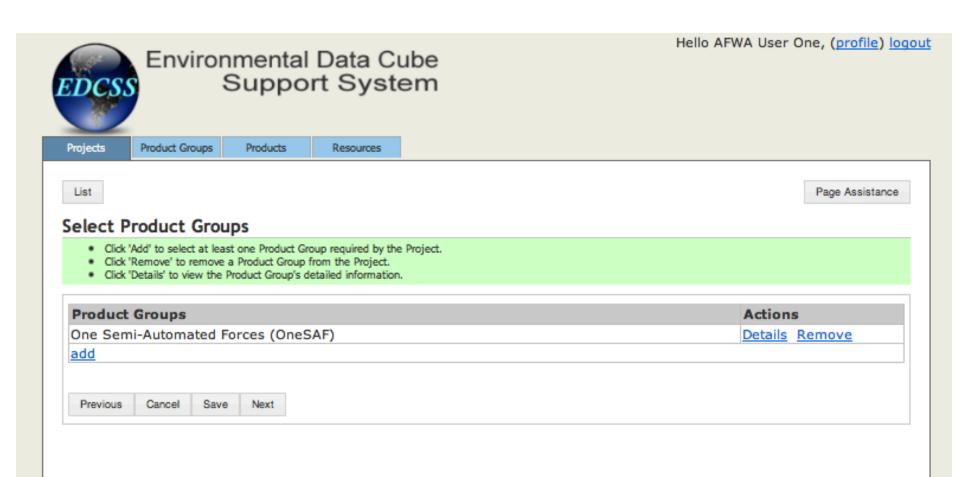


Defining the AOI



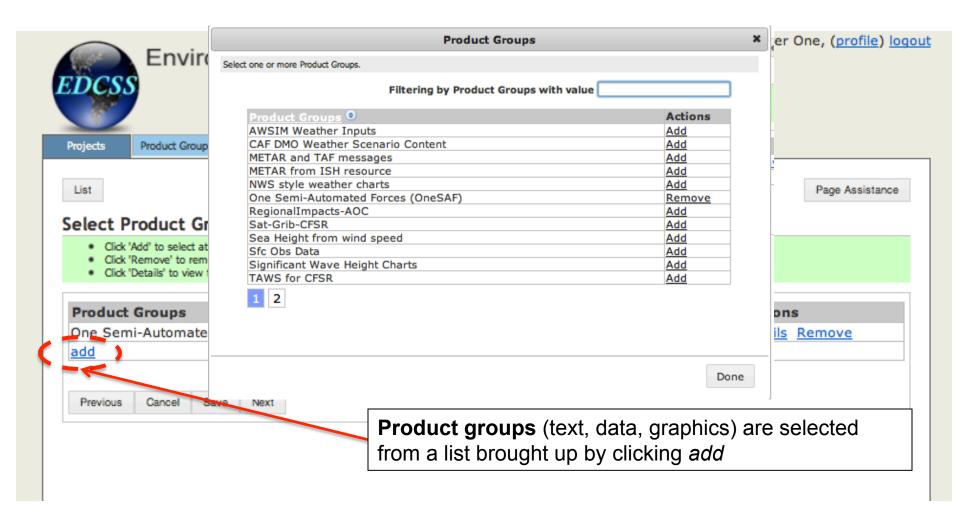


Establishing the products list



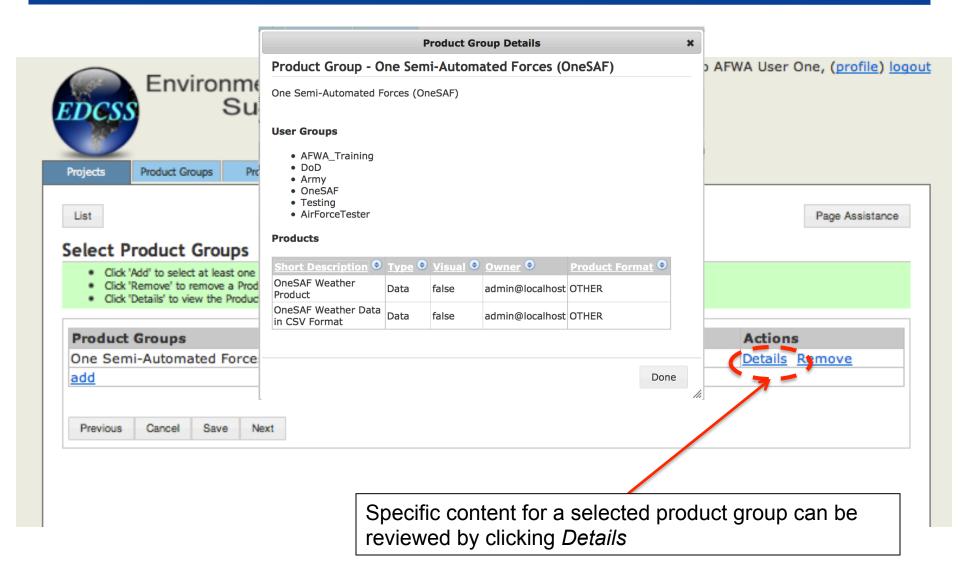


Establishing the products list



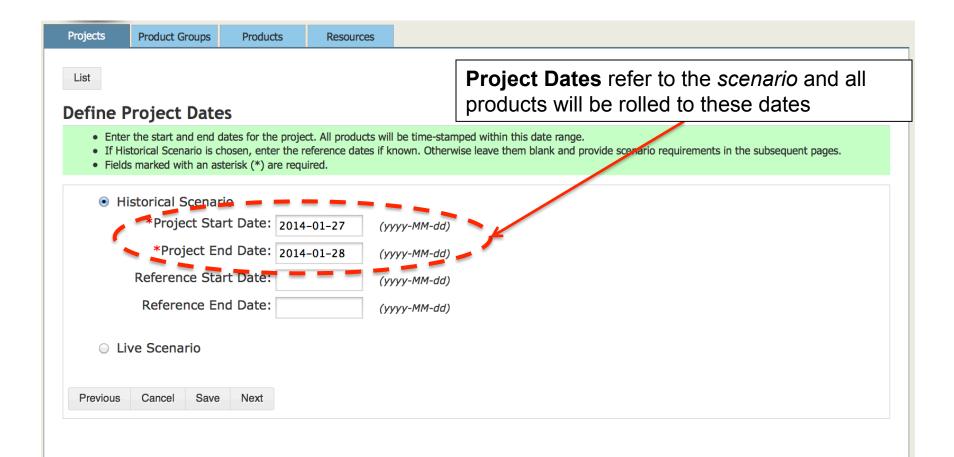


Establishing the products list



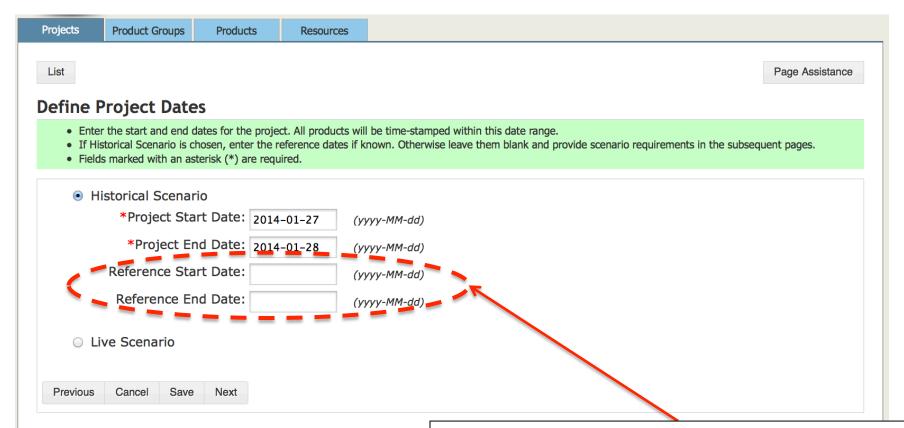


Establishing project dates





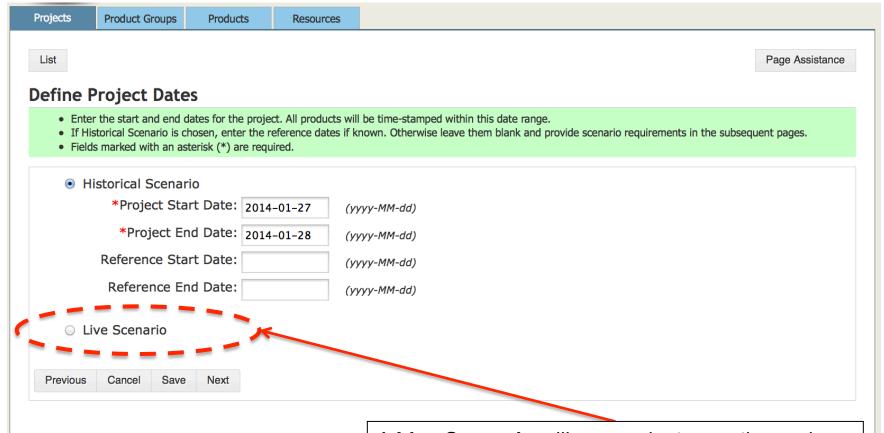
Establishing project dates



Reference Dates can be supplied if the user has a specific scenario in mind, or more often these dates are left blank to trigger a *scenario search*



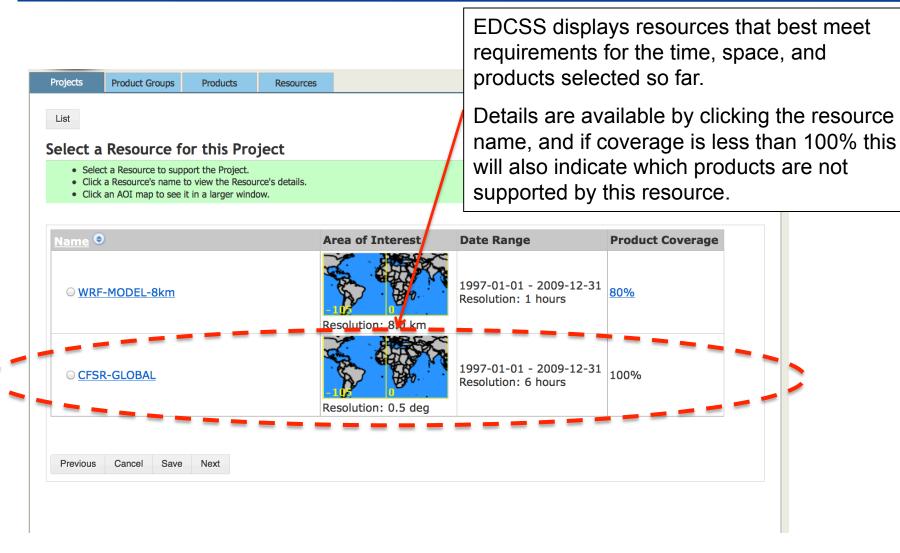
Live scenarios



A **Live Scenario** will run against a continuously updated resource, such as an AFWA JMBL resource.

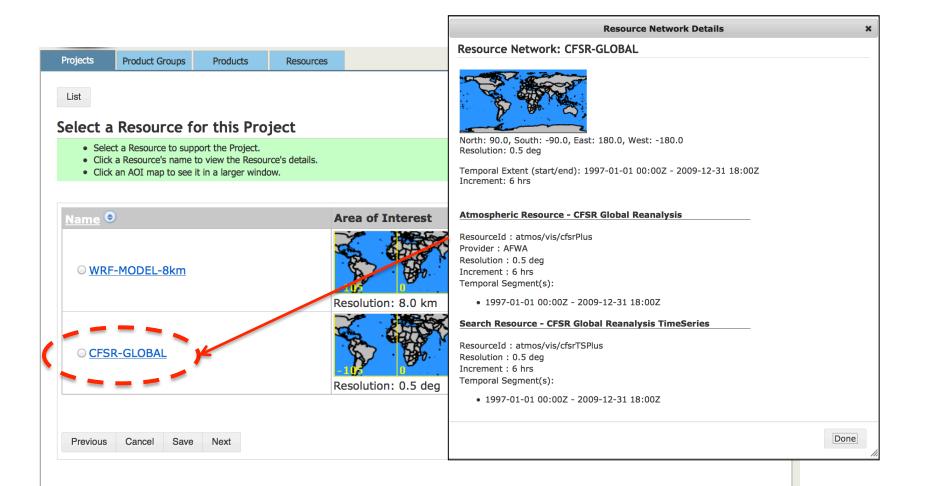


Selecting resources





Resource details





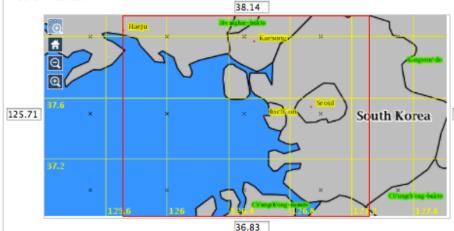
Scenario Specification

- A scenario search is performed over a small number of days, typically one month, for every year in the search date range that is supported by the Project's Resource.
- (Optional) Refine the scenario's search dates; by default, the entire month(s) encompassing the Project's dates and the full yearly extent of the Project's Resource is used.
- (Optional) Refine the scenario's area of interest to improve both the speed and accuracy of the scenario search. The maximum number of points to search is 50.
- Define criteria for at least one Operation/System or Environmental scenario.

Search Dates

Start Date: 1997-01-01 (yyyy-MM-dd) End Date: 2009-01-31 (yyyy-MM-dd)

Area of Interest



The scenario can be specified in terms of rule-based impacts (e.g. red weather for Convoy Operations) or actual environmental criteria (e.g. ceiling < 1000 feet).

The scenario search should generally be made over a smaller area than the project, with as few grid points as possible in the subarea of interest.

*Specify Operation/System Impacts (Add)

Click 'Add' to select an Operation or System.

After selecting an Operation or System, impacts may optionally be defined in 3 hour increments by clicking the 'Detail' link.

*Specify Environmental Criteria (Add)

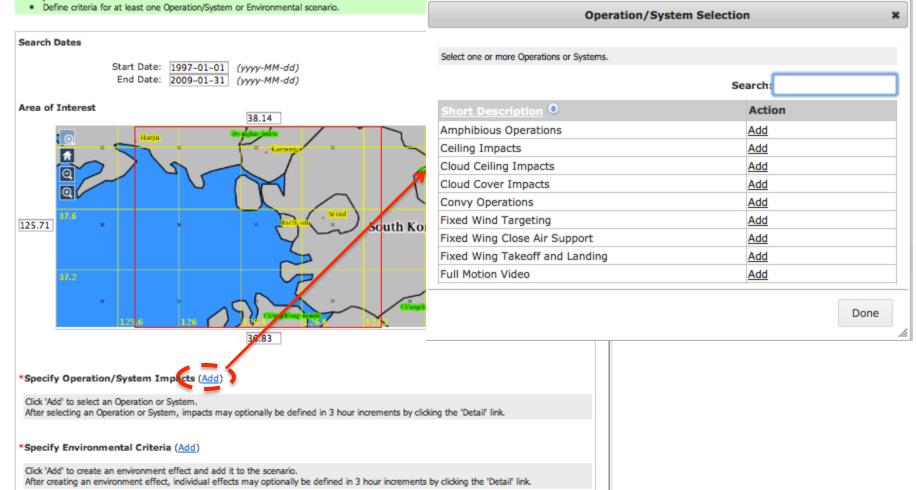
Click 'Add' to create an environment effect and add it to the scenario.

After creating an environment effect, individual effects may optionally be defined in 3 hour increments by clicking the 'Detail' link.

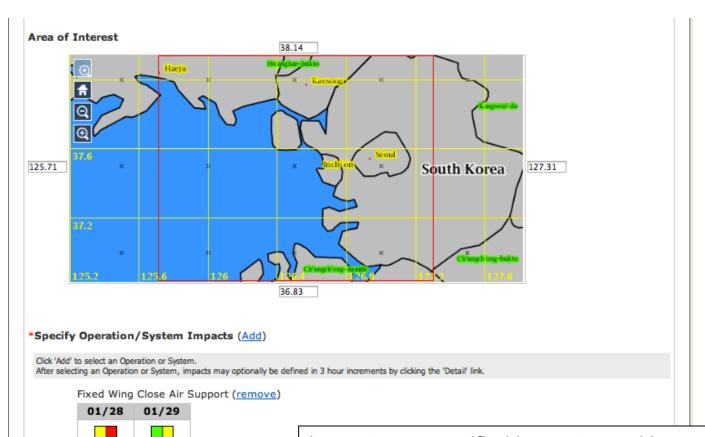


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Convy Operations (remove)

Detail

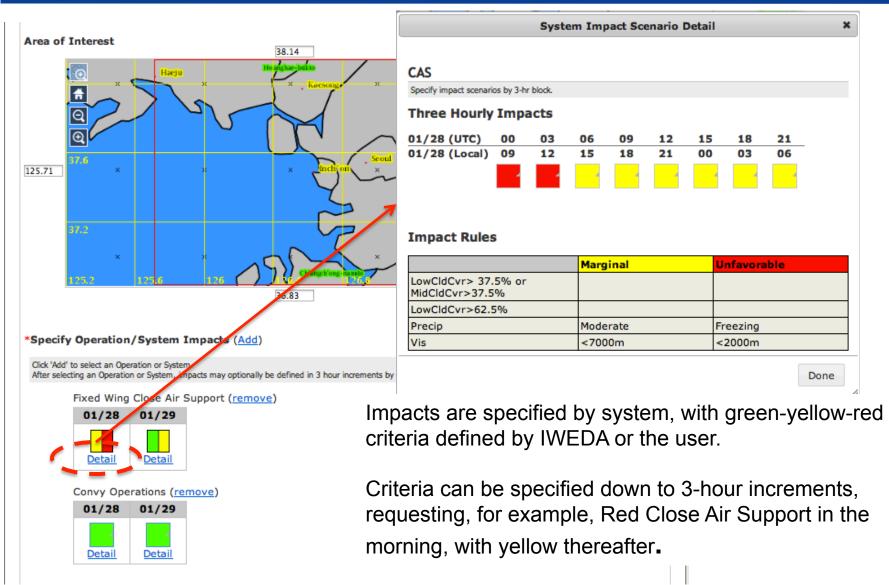
Detail

01/28 01/29

Detail Detail

Impacts are specified by system, with green-yellow-red criteria defined by IWEDA or the user.





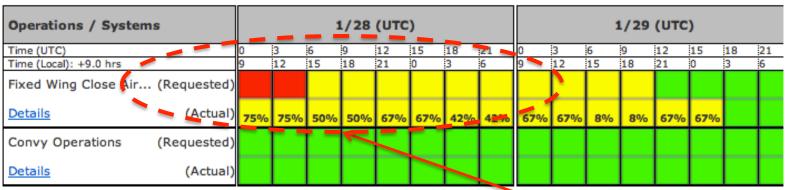


Review Search Results

- · Review the requested scenario criteria against the actual, data-backed impacts for each set of reference dates.
- Click 'Next' and 'Previous' to cycle through scenario criteria charts for different reference dates.
- Click 'Details' to view the scenario break down of a Operation/System or Environmental criteria.
- Within Operations/Systems click any 3-hourly block to view the spatial impact graphic for that time.

Storyboard

Reference Dates: 2003-01-26 - 2003-01-27 Previous Next



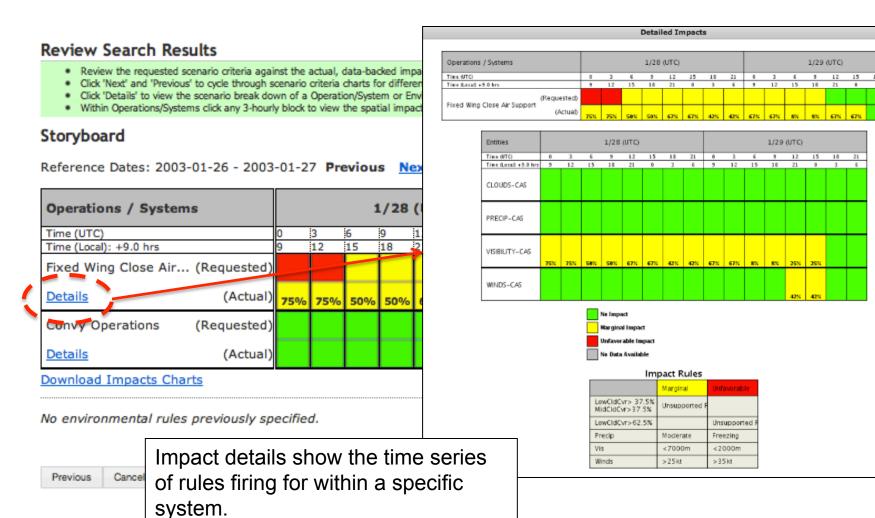
Download Impacts Charts

No environmental rules previously specified.

Previous Cancel Preview Products Build

Results are presented as *Requested* compared to *Actual* for your evaluation. The fuzzy nature of the EDCSS search will nearly always return some result.





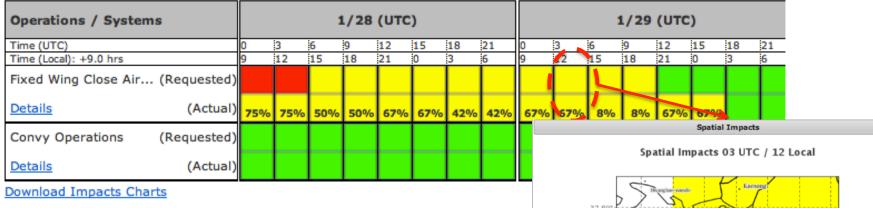


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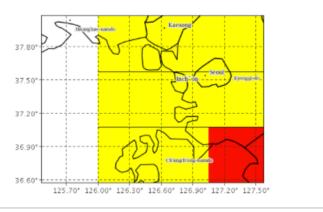
Reference Dates: 2003-01-26 - 2003-01-27 Previous Next



No environmental rules previously specified.

Previous Cancel

Spatial impacts show the geographic distribution by mission area or system.



Done

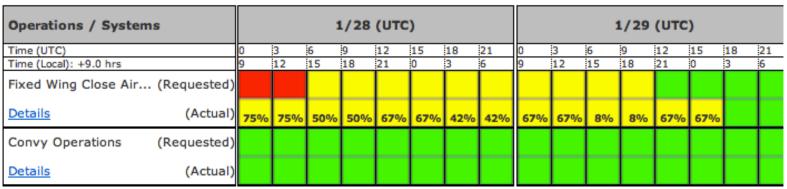


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Storyboard

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Download Impacts Charts

No environmental rules previously specified.

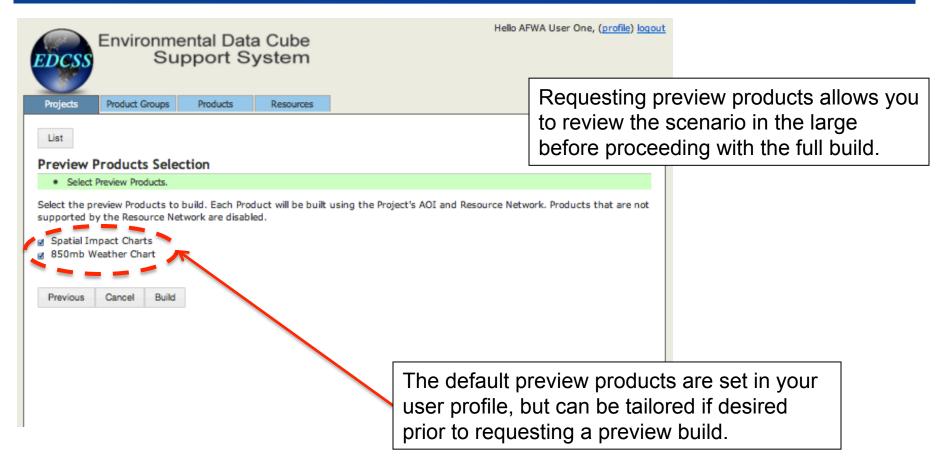


At this point you can choose to

- 1. Cancel, adjust criteria, and restart scenario search
- Build preview products to ensure the scenario will meet all of your criteria
- 3. Accept this scenario and proceed with the full Build



Building preview products





Reviewing preview products

Preview Products

- . Select a preview Product from the left panel by clicking the Product's description.
- . Click 'Play', 'Pause', '<<', or '>>' to control the display of imagery for a sequence of times.

Reference Dates: 2003-01-26 - 2003-01-27

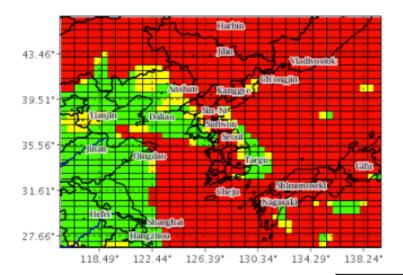
Products				
Spatial Impact Charts - Convy				
Operations				
850mb Weather Chart				
Spatial Impact Charts - Fixed				
Wing Close Air Support				

Spatial Impact Charts - Fixed Wing Close Air Support: 201

Product preview allows you to review the scenario in the large before proceeding with the full build.

Spatial Impacts 18 UTC / 03 Local

Download Products



If the scenario appears correct and complete, the next step is *Build*





Customizing the product build

Prior to the full build, you can further customize the product

list for time and resolution,

in a product group for this

build.

and optionally omit products

Pre-Build Review

· Pre-Build Review.

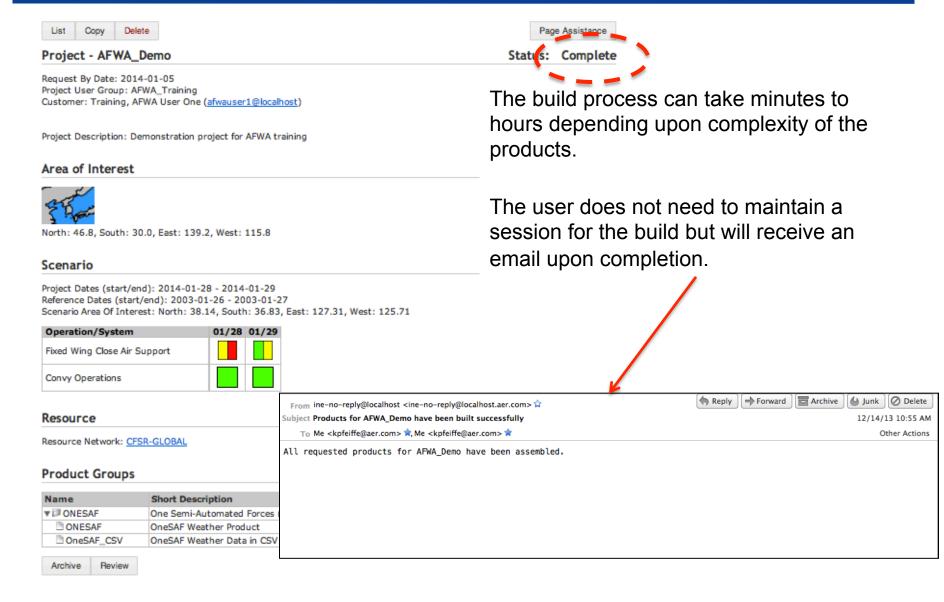
Please confirm that you would like to start production for all Products associated with this Project. The production process time will vary depending on the Products requested. An email will be sent once production is complete, or you can login to the web site to check the status of your Project.

Product Groups

Product	Increment (hours)	Projection	Resolution (deg)	Includ
Standard WMO METAR reports	1 💌	Native 💌	1.0 🕶	~
Standard TAF forecast messages	6 🕶	Native 🕶	1.0	V
Weather Graphics				
Product	Increment (hours)	Projection	Resolution (deg)	Includ
300mb Weather Chart	6 💌	Geodetic 💌	1.0 🕶	~
500mb Weather Chart	6 🕶	Geodetic 🕶	1.0 🕶	~
700mb Weather Chart	6 💌	Geodetic 🕶	1.0 🕶	~
850mb Weather Chart	6	Geodetic 🕶	1.0 💌	~
925mb Weather Chart	6	Geodetic 🕶	1.0 🕶	~
Total Cloud Cover Chart	6	Geodetic 🕶	1.0 💟	<u>~</u>
Surface Weather Chart	6	Geodetic 🕶	1.0 💟	~
Surface Precip Weather Chart	6 🔻	Geodetic 🔽	1.0 🗸	~

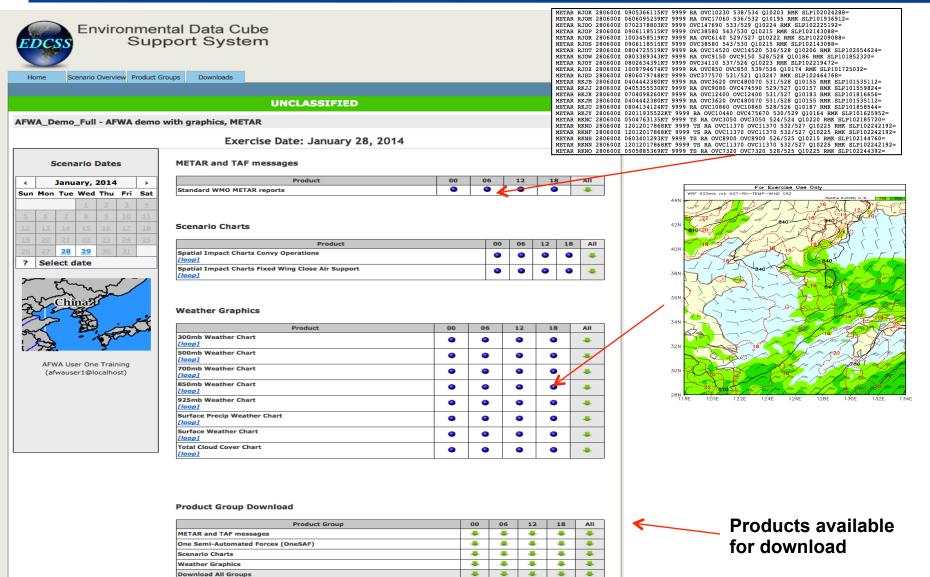


Building the full project





EDCSS Project Review Site





Getting Help

